

Knitting machineTechnical field

The invention relates to a knitting machine according to the preamble of claim 1.

Prior art

There are many known knitting machines of the type initially mentioned. Such knitting machines are equipped with an electronic control device for controlling the knitting machine on the basis of a pattern program for the textile material to be produced. The pattern program may be produced in the control device itself or in an external electronic pattern apparatus from which it can then be supplied to the electronic control device in the knitting machine by means of a data carrier or data line. The knitting machine contains, furthermore, electrically driven thread feeders for supplying weft threads to the weft bars which, according to the pattern program, lay the weft threads across the knitting needles which tie up the weft threads. The knitting machines are equipped, furthermore, with a take-down device for the textile material produced. The disadvantage, however, is that the thread feeders can operate only at an adjustable constant speed which is not sufficient in many instances, since, particularly in the case of changing patterning, changing delivery quantities for the weft thread or weft threads are also required, and the weft bars have themselves to draw addition thread lengths which are lacking. This leads to faults in the textile material and/or also in the knitting machine during the processing of thread qualities which, in particular, have different thicknesses.

US-A-4,487,039 discloses a warp knitting machine in which weft threads are supplied to two transport devices arranged at a distance from one another. For this purpose, there is a carriage which is movable to and fro between the transport devices and to which the weft threads are supplied by means of a driven delivery mechanism. The drive of the delivery mechanism to be changed continuously, taking into account the instantaneous carriage speed and carriage position, in order to adapt the tension of the weft threads to the changing speeds and positions of the carriage and to keep said tension as constant as possible. The drive is controlled via a pulse generator which is dependant on the rotation of the main shaft. An individual control of the length of the weft thread to be supplied in each case, on the one hand, and of the required length on the basis of the pattern program, on the other hand, cannot be gathered from this publication.

#### Presentation of the invention

The purpose of the invention is to improve further a knitting machine of the type initially mentioned.

The said object is achieved by means of the characterizing features of claim 1. Since the control device has control means in order to set the